

## CONSULTATION/COORDINATION

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### HISTORY OF PUBLIC INVOLVEMENT/AGENCIES CONSULTED

As described in the Purpose and Need, Planning Process section, scoping was conducted twice for the Chiricahua GMP. The Notice of Intent to publish an Environmental Impact Statement was published in June of 1999. This Draft Environmental Impact Statement will be available for public review for a minimum of 60 days.

The following agencies were contacted during preparation of the plan:

US Fish and Wildlife Service  
Arizona State Historic Preservation Office

### PLANNING TEAM

#### National Park Service

Alan Cox, *Superintendent, Chiricahua NM and Fort Bowie NHS*—BS in Criminal Justice from Sul Ross State University, Alpine Texas. 24 years NPS at 7 different National Park Units. Responsible for overall process, adjacent land owners, operational efficiency, purpose and need, alternatives, economic contributions, and final recommendation to Regional Director

Kathy M. Davis, *Resources Manager, Southern Arizona Office*—Masters of Forestry from University of Montana, 20 years NPS, 3 years USFS, 5 years CSIRO in Australia. Responsible for coordination, purpose and need, and list of recipients.

Don Goldman, *Planner, Intermountain SO-Santa Fe*—B.A.A.S. Geography, 36 years NPS, 5 years University of California at Los Angeles (UCLA). Responsible for purpose and need, alternatives, consultation/coordination, cumulative effects, land appendixes.

Lori Kinser, *Visual Information Specialist, Intermountain SO-Denver*—24 years as a

primary provider of graphic support. Responsible for the production of Graphics.

Larry Ludwig, *Unit Manager, Fort Bowie NHS*—10 years with National Park Service, B.S. History, Arizona State University. Responsible for visitor experience, archeological sections .

Christopher Marvel, *Lead Planner, Intermountain SO-Denver*—BLA/BS NYS College of Environmental Science and Forestry/Syracuse University, 21 years Government (10 USFS, 11 Year NPS). Responsible for coordination, purpose and need, alternatives, tables, contract coordination, and economic contributions.

Chris Turk, *Regional Environmental Quality Officer, Intermountain SO-Denver*—B.A.A.S. Biological Sciences, 21 years NPS, 5 years U DE College of Marine Studies. Responsible for coordination, purpose and need, and alternatives.

Alan Whalon, *Resource Manager, Chiricahua NM*—MFS, Natural Resource Management (Yale); Private Consulting Forester, Currently Chief, Resources Management & Education (Chiricahua NM & Fort Bowie NHS); also worked with NEPA and NHPA process at Acadia NP, Chaco Culture NHP, Big Cypress National Preserve, Hovenweep NM, Assateague Island NS, Hampton NHS. Responsible for Long-Term Health of Natural Systems.

John Reber, *Physical Scientist, Air and Water Resource Coordinator for Intermountain Support Office, National Park Service*. B.S. Biology, M.S.

Biology/Environmental Monitoring Univ. of Hartford. 8 years NPS including 7 years resource planning. 9 years Technical Services Director and Quality Assurance Manager in private concrete and construction materials firms. 7 years Environmental Analyst in private engineering and environmental consulting firm. Responsible for Statement of Findings

and write-up on wetlands and flooding issues throughout the document.

Jill Cowley, Historical Landscape Architect and Manager of the Santa Fe Office Cultural Landscapes program, National Park Service. Masters of Landscape Architecture from Utah State University. 11 years National Park Service (cultural landscapes and park planning), 1 year Forest Service (site planning/design), 1/2 year visiting lecturer at Charles Sturt University, Australia. Responsible for Cultural Landscapes.

### **Volunteers in Parks**

Kenneth Bennett, Historical Architect, retired National Park Service

Kane Orr, Student, Mesa Community College/Arizona State University

### **CONTRIBUTORS**

Rob Danno, Chief Ranger, Chiricahua NM

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George Teague, Western Archeological Conservation Center, National Park Service

Bryant Smith, U.S. Forest Service

Lynn Saline, Bureau of Land Management

Dan Fischer, Park Neighbor

Don Higgins, Park Neighbor

Linda Carlson, Carlson Editing

### **LIST OF RECIPIENTS**

USFWS, Regional Director

Mayor Ray Borane, Mayor of Douglas, AZ

Eddie Browning, Executive Director, Willcox Chamber of Agriculture and Commerce

William T. Civish, Field Office Manager, Bureau of Land Management

Mayor Marlin Easthouse, Mayor of Willcox, AZ

Dan Fischer, Park Neighbor

Jim Garrison, AZ State Historic Preservation Office

Bill Halvorson, USGS/ BRD, AZ CPSU Station Leader

Douglas Hardy, District Ranger, Douglas Ranger District, Coronado National Forest

Don Higgins, Park Neighbor

Representative Jim Kolbe, House of Representatives

Senator Jim McCain, United States Senator

John McGee, Forest Supervisor, Coronado National Forest

Jim Riggs, Park Neighbor

Lynn Saline, Bureau of Land Management

Dave Simon, Southwest Regional Director, National Parks and Conservation Association

Bryant Smith, U.S. Forest Service

George Teague, Director, Western Archeological Center

## REFERENCES CITED

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### NATIONAL PARK SERVICE

- 1979 "National Register nomination, Faraway Ranch," by Gordon Chappell, Chiricahua NM, Arizona.
- 1980 Natural Resources Management Plan, Chiricahua National Monument, February
- 1990 "Money Generation Model," by Richard Briceland. NPS Statistical Office, Washington, D.C.
- 1992 "Draft National Register Nomination, CCC Buildings," by Berle Clemenson, Chiricahua NM, Arizona.
- 1993 *Floodplain Management Guideline*, Washington Office, Washington, D.C.
- 1994 "Trip Report Memorandum, Hydrologic Investigations at Chiricahua National Monument, January 4, 1994," by M. Martin and G. Smillie, Water Resources Division, Fort Collins, Colorado.
- 1997a "Trip Report Memorandum, Hydrologic Investigations at Chiricahua National Monument and Fort Bowie National Historic Site, June 23, 1997," by M. Martin, Water Resources Division, Fort Collins, Colorado.
- 1997b "Trip Report Memorandum, Water Resource Assistance at Chiricahua National Monument, October 7, 1997," by D. Sharrow, Water Resources Division, Fort Collins, Colorado.

- 1998 "Strategic Plan, Government Performance and Results Act, Chiricahua NM." Unpublished document of file at Chiricahua NM, Arizona.
- 1999 *Transportation Study, Chiricahua National Monument*. Prepared by Parson Brinkerhoff, Denver Service Center, Denver, Colorado.

### ST. CLAIR, LARRY L., KIM T. ANDERSON, AND CLAYTON C. NEWBERRY

- "Lichen Biomonitoring Program and Air Quality Baseline in Chiricahua National Monument and Fort Bowie National Historic Site," final report submitted to NPS.

### UNIVERSITY OF ARIZONA

- 1990 "Small Mammal Inventory of Chiricahua National Monument, Cochise County, Arizona," by Douglas K. Duncan. Technical Report No. 30.
- 1997 "Faraway Ranch, Chiricahua NM, Cultural Landscapes Inventory, Level 2," by Carla Singer, Michal Tincup, and Steven White. Department of Landscape Architecture. Completed under cooperative agreement with National Park Service, Santa Fe, New Mexico.



## APPENDIX 1: LEGISLATION

### Chiricahua National Monument

Establishment: Proclamation (No. 1692) of April 18, 1924.....	Page 154
Enlarging the area: Proclamation (No. 2288) of June 10, 1938.....	154

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

### A PROCLAMATION

[No. 1692—Apr. 18, 1924—43 Stat. 1946]

WHEREAS, certain natural formations, known as "The Pinnacles", within the Coronado National Forest, in the State of Arizona, are of scientific interest, and it appears that the public interests will be promoted by reserving as much land as may be necessary for the proper protection thereof, as a National Monument.

NOW, THEREFORE, I, Calvin Coolidge, President of the United States of America, by virtue of the power in me vested by section two of the Act of Congress approved June eight, nineteen hundred and six, entitled, "An Act for the preservation of American antiquities", do proclaim that there are hereby reserved from all forms of appropriation under the public land laws, subject to all prior valid adverse claims, and set apart as a National Monument, the following described tracts of land in the State of Arizona:

W $\frac{1}{2}$  Sections 19, 30 and 31, Township 16 South, Range 30 East, G. & S. R. M.; Sections 24, 25 and 36, Township 16 South, Range 29 $\frac{1}{2}$  East, G. & S. R. M.; S $\frac{1}{2}$  Section 24, unsurveyed; Section 35, unsurveyed; Section 36, unsurveyed; Township 16 South, Range 29 East, G. & S. R. M.

The reservation made by this proclamation is not intended to prevent the use of the lands for National Forest purposes under the proclamation establishing the Coronado National Forest, and the two reservations shall both be effective on the land withdrawn but the National Monument hereby established shall be the dominant reservation and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden.

Warning is hereby given to all unauthorized persons not to appropriate, injure, deface, remove or destroy any feature of this National Monument, or to locate or settle on any of the lands reserved by this proclamation.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 18 day of April, in the year of our Lord one thousand nine hundred and twenty-four, and of the [SEAL] Independence of the United States of America the one hundred and forty-eighth.

CALVIN COOLIDGE.

By the President:  
CHARLES E. HUGHES,  
*Secretary of State.*

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

### A PROCLAMATION

[No. 2288—June 10, 1938—52 Stat. 1551]

WHEREAS it appears that the hereinafter-described lands comprising a part of the Coronado National Forest, in the State of Arizona, are adjacent to

# VIII. NATIONAL MONUMENTS—CHIRICAHUA

the Chiricahua National Monument, established by proclamation dated April 18, 1924, and are required for the proper care and management of the objects of historic and scientific interest being protected by the said monument:

NOW, THEREFORE, I, Franklin D. Roosevelt, President of the United States of America, under and by virtue of the authority vested in me by section 1 of the act of June 4, 1897, 30 Stat. 11, 34, 36 (U. S. C., title 16, sec. 473), and section 2 of the act of June 8, 1906, ch. 3060, 34 Stat. 225 (U. S. C., title 16, sec. 431), do proclaim that, subject to all valid existing rights, the following-described lands in the State of Arizona are hereby excluded from the said Coronado National Forest and are hereby added to and made a part of the said Chiricahua National Monument:

## GILA AND SALT RIVER MERIDIAN—ARIZONA

- T. 16 S., R. 29 E., sec. 22, all,  
sec. 23, all, partly unsurveyed,  
sec. 24, N $\frac{1}{2}$ , unsurveyed,  
sec. 25, all, unsurveyed,  
sec. 26, all,  
sec. 27, N $\frac{1}{2}$ ;  
T. 17 S., R. 29 E., sec. 1, N $\frac{1}{2}$ , N $\frac{1}{2}$  SE $\frac{1}{4}$ , NE $\frac{1}{4}$  SW $\frac{1}{4}$ ,  
sec. 2, N $\frac{1}{2}$ ;  
T. 16 S., R. 29 $\frac{1}{2}$  E., sec. 13, S $\frac{1}{2}$ ;  
T. 17 S., R. 29 $\frac{1}{2}$  E., sec. 1, N $\frac{1}{2}$ , unsurveyed;  
T. 16 S., R. 30 E., sec. 18, S $\frac{1}{2}$ ,  
sec. 19, E $\frac{1}{2}$ ,  
sec. 30, E $\frac{1}{2}$ ,  
sec. 31, E $\frac{1}{2}$ ,  
sec. 32, W $\frac{1}{2}$  W $\frac{1}{2}$ ;  
T. 17 S., R. 30 E., sec. 5, W $\frac{1}{2}$  NW $\frac{1}{4}$ , unsurveyed,  
sec. 6, N $\frac{1}{2}$ , unsurveyed;

containing approximately 6,407 acres.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of the monument as provided in the act of Congress entitled "An act to establish a National Park Service, and for other purposes," approved August 25, 1916, 39 Stat. 535 (U. S. C., title 16, secs. 1 and 2), and acts supplementary thereto or amendatory thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this tenth day of June in the year of our Lord nineteen hundred and thirty-eight, and of the Independence [SEAL] of the United States of America the one hundred and sixty-second.

FRANKLIN D. ROOSEVELT.

By the President:  
CORDELL HULL,  
*Secretary of State.*

## **APPENDIX 2: FUTURE PLANS AND STUDIES NEEDED**

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Future plans and studies needed for Chiricahua include:

- Archeological survey
- Biological surveys
- Campground operating plan
- Collections management plan
- Comprehensive interpretive plan
- Cultural landscape inventory for CCC landscape areas
- Cultural landscape reports for Faraway Ranch and CCC landscape areas
- Engineering design concept report on Bonita Canyon Road
- Entire park archeological inventory
- Estimated development costs
- Ethnographic overview and assessment
- Fire management plan
- Historic resources study
- Historic structures preservation guide
- Inventory of mammals, birds, and plants
- Park administrative history
- Traffic conditions study (one week, spring)
- Vegetation management plan
- Viewshed analysis
- Transportation study (currently under contract with Parsons Brinkerhoff to address economic feasibility and other transportation Issues)





## APPENDIX 3: DRAFT STATEMENT OF FINDINGS

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FOR  
EXECUTIVE ORDER 11988 "FLOODPLAIN MANAGEMENT"

Bonita Creek Campground  
General Management Plan, Draft Environmental Impact Statement  
Chiricahua National Monument  
Arizona

Recommended: \_\_\_\_\_

*Superintendent, Chiricahua National Monument* *Date*

Concurred: \_\_\_\_\_

*Chief, Water Resources Division* *Date*

Approved: \_\_\_\_\_

*Director, Intermountain Region* *Date*

In accordance with Executive Order 11988 (Floodplain Management) and National Park Service guidelines for implementing the order, the National Park Service (NPS) has evaluated flooding hazards for the campground at Chiricahua National Monument and has prepared this statement of findings (SOF). As an integral part of the effort to develop a general management plan (GMP) for the monument, the SOF describes the flood hazard, alternatives, impacts, mitigation, and informed decisions for the continued use of the campground. Additional detail regarding the monument, campground, flooding history, and future plans may be found in the GMP.

## **INTRODUCTION**

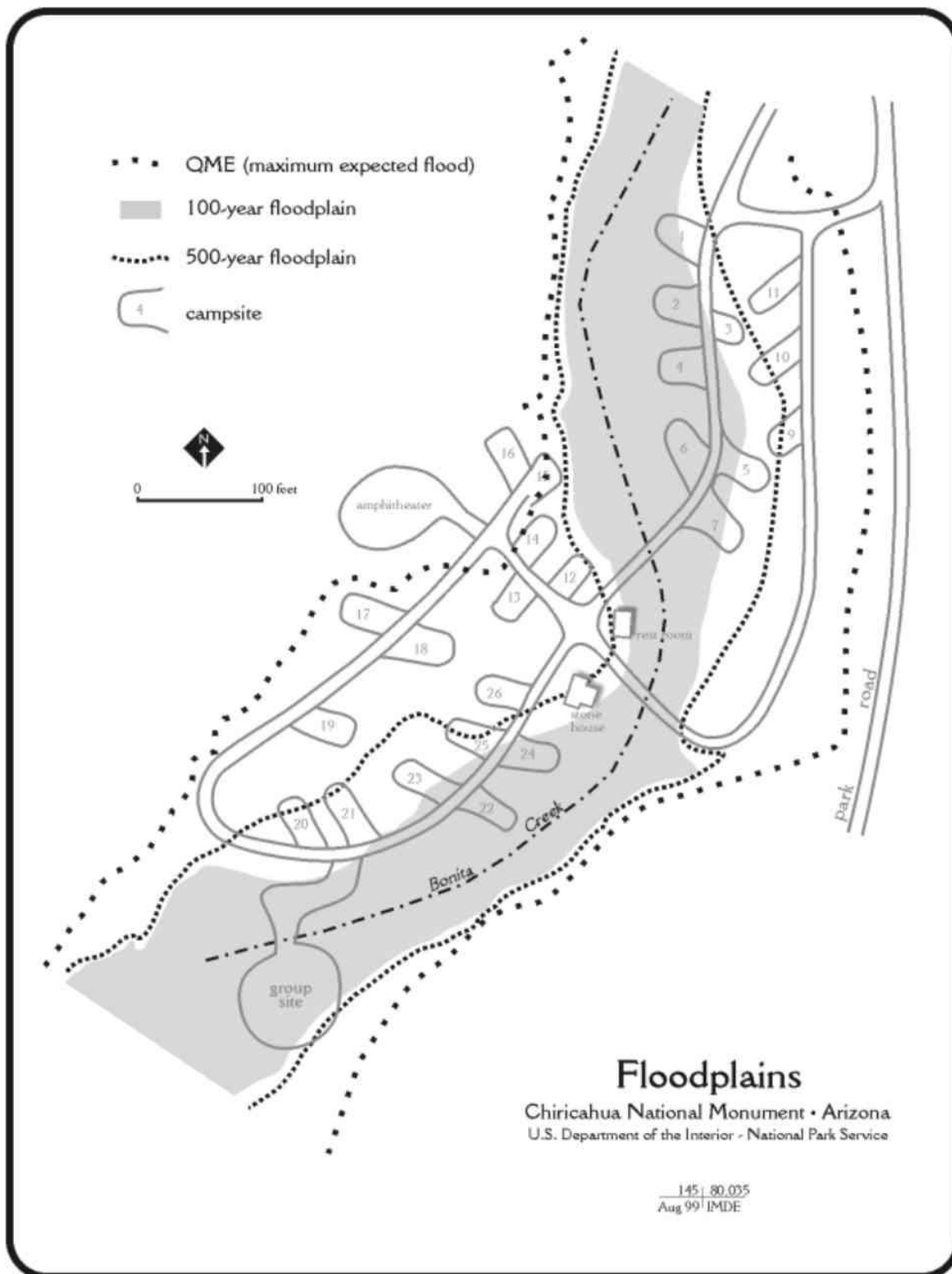
The Civilian Conservation Corps originally constructed the Bonita Creek campground in the 1930s. It contains historically significant structures from that era, including rest rooms and one staff housing unit. The campground amphitheater contributes significantly to the park interpretive program.

The park will continue to operate the existing 25-site campground at Chiricahua with an operational plan (campground operation plan) that significantly lowers the threat to life and property within the campground area. The monument will develop this plan, regularly educate staff and visitors in its detail, and periodically review it with any additional weather or flooding information that becomes available. Chiricahua NM is nestled into the northwestern Chiricahua Mountains bound on the east by the Coronado National Forest and the west by Sonoran and Chihuahuan Deserts. The monument contains 11,985 acres of very steeply eroded mountain slopes, terrain sculpted by

water, wind, and ice for more than 25 million years. The campground lies on gentle terrain alongside Bonita Canyon Drive and astride the seasonal Bonita Creek (see floodplain map). Flooding in the area is responsive to the steep and rocky terrain and the intense thunderstorms common during the monsoon period in Arizona from July through September. Bonita Creek, and the neighboring Rhyolite Creek, can rise quickly in response to intense rains, and flooding can be further intensified by ground saturation in the watersheds from previous rainfall.

## **USE OF THE FLOODPLAIN**

The only paved road for visitors in the monument winds along Bonita Creek and the combined Bonita and Rhyolite Creeks. The road services and connects the visitor center, historic structures, campground, and staff housing, filling most all of the available gently sloped terrain in the monument. Most of the campground is within the 100-year and 500-year floodplain, and all of it is within the maximum expected flood event boundaries. Use of this delineated floodplain area subject to flash flooding for a campground is considered a class III action and requires notification, warning and development of mitigation for the flooding threat. The campground lies in the only available terrain for such use within the monument. No additional flat or gently sloped areas remain in the park that could be suitably developed with water and sewer utilities, without serious impacts to natural or cultural resources and wilderness. All other gentle terrain on site is already occupied with visitor facilities, historic structures, or similar or worse flooding threats.



The available camping sites within the monument do not meet the visitors' demand for sites with trees and in close proximity to water. Currently, there are insufficient numbers of alternative camping sites available outside of the monument. Limited camping is available nearby in the Coronado National Forest. Additional camping areas outside the monument could be developed by a private party at some time in the future, but these potential locations appear to be in open areas, unprotected from wind or sun, and thus undesirable for most campers.

## **FLOOD RISK**

The campground is entirely within the maximum estimated flood for Bonita Creek, with most of the campsites affected by the 500-year and 100-year flood flows (eight sites are within the 100-year floodplain).

During the August 1993 flood event, the discharge in Bonita Creek was approximately 350 cubic feet per second (cfs) upstream of the campground. After the input from Surprise Canyon's watershed, midpoint in the campground, Bonita Creek approached 600 cfs. Because of a frequently blocked culvert, the tributary from Surprise Canyon overtopped the park road and destroyed one campsite in its path. A complete collapse of the park road embankment would have directly threatened one-third of the campground with a short-lived 5 to 10-foot wall of water. No campers were injured in that flood event, although substantial damage occurred in the path of Rhyolite Creek during the same event. The potential breakthrough of the main road embankment spanning the Surprise Canyon tributary during flooding could cause major erosion damage.

Because the watershed area is so small, the time required for the flooding to occur on Bonita Creek could be short, but there are warning signs to consider. Flooding would have to occur during an intense rainstorm, possibly preceded by ground saturating storms and most likely during the months of

July through September. Because the watershed is so small, there also would be some local awareness of flooding potential because intense rainfall in the watershed would likely be occurring at the campground and visitor center. Adequate warning through the use of automated flood stage alarms or rainfall gauges has been evaluated and found impractical because of the speed at which the flooding could occur, the cost of installation and maintenance of such a system, and the false sense of security such a system could instill.

The best opportunity for evacuation of the campground currently lies primarily with early warning. During a flooding event, the options for some campers are limited. Access to higher ground is readily available to more than half of the sites, but campers would have to evacuate by means other than the campground access roads they arrived by. Because of the low elevation of the access roads, the complex confluence of Bonita Creek and the Surprise Canyon tributary, and the chaotic nature of flooding in an unknown and possibly dark campground, it is expected that campers would require assistance to safely avoid the flood waters.

## **PROPOSED ACTION**

The NPS will continue to operate the Bonita Creek campground in a safe and prudent manner by selective closures and flood threat awareness training for staff and visitors to Chiricahua NM. The selective closures of the campground will derive from use of the campground operation plan and be based upon seasonal and predicted weather conditions at the monument. Closures will occur on a day-by-day basis according to immediate observations by monument staff, weather forecasts of particular intensity, and modified by any presaturation of the watershed and the season of the year. Monument staff will budget or request funding for replacement of the culvert carrying the Surprise Canyon tributary beneath the main park road close to the campground.

The NPS will develop a campground operational plan to address flooding threats:

- Develop a decision tree for monument staff to minimize the threat to life by clear planning choices
- Closure conditions
- Seasonal, watershed saturation, and storm event priorities
- Notification protocols for monument staff, visitors, and campers
- Train staff, campground hosts, and volunteers in the implementation of the plan
- Prepare informational and warning signs, brochures
- Establish formal notification/warning procedures between the monument and the National Weather Service
- Heightened awareness periods during the monsoon rain months of July, August, and September, especially when the watershed is saturated by previous rains
- Preemptive night camping closure of the campground using the decision tree
- Formalization of evacuation routes and mobilization sites for rescue
- Review and revise the plan elements every two to three years

This proposed action does not represent a new or expanded impact upon natural resource, cultural resource, or park infrastructure floodplain values in the monument. It does represent an informed decision concerning the continuation of a risk to human life that is minimized by the mitigation contained in the campground operation plan. The risk to human life in the campground cannot be eliminated entirely.

If the campground is damaged in future flooding or, as additional camping facilities are developed outside the monument by private parties, the monument staff will consider closing all or part of the Bonita Creek campground on a seasonal or entire basis, or converting it to day use picnicking only.

## SUMMARY

The NPS will continue to operate the existing 25-site campground in the floodplain at Chiricahua National Monument with selective closure options described in an operational plan (campground operation plan) that significantly lowers the threat to life and property within the campground area. The monument will develop this plan, regularly educate staff and visitors in its detail, and periodically review it with any additional relative weather or flooding information that becomes available.

## REFERENCES

### National Park Service

- 1993 Floodplain Management Guideline, Washington Office, Washington, D.C.
- 1994 "Trip Report Memorandum, Hydrologic Investigations at Chiricahua National Monument, January 4, 1994," by M. Martin and G. Smillie, Water Resources Division, Fort Collins, Colorado.
- 1997 "Trip Report Memorandum, Hydrologic Investigations at Chiricahua National Monument and Fort Bowie National Historic Site, June 23, 1997," by M. Martin, Water Resources Division, Fort Collins, Colorado.
- 1997 "Trip Report Memorandum, Water Resource Assistance at Chiricahua National Monument, October 7, 1997," by D. Sharrow, Water Resources Division, Fort Collins, Colorado.